### Hickman Air Pollutant Sources

#### Hickman Air Emission Sources

## Arlington (North and South) – currently designed for a capacity of 4.3 million chickens

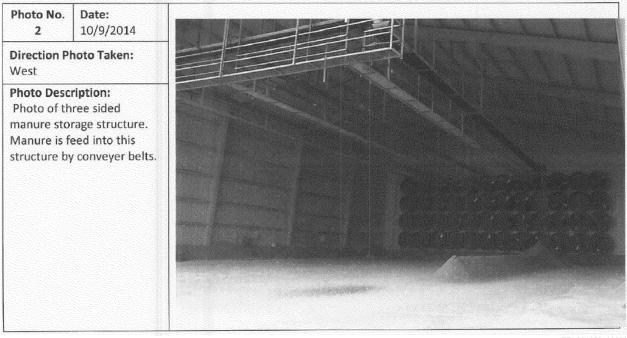
- Pollutant sources
  - Chicken houses
  - Egg processing plant
    - Boilers for shell eggs
  - Protein plant for culled chickens (fed to chickens and in future pet food)
  - Rotary dryers (and associated manure belt) to dry compost prior to becoming fertilizer pellet

#### Tonopah – currently designed for a capacity of 5.5 million chickens

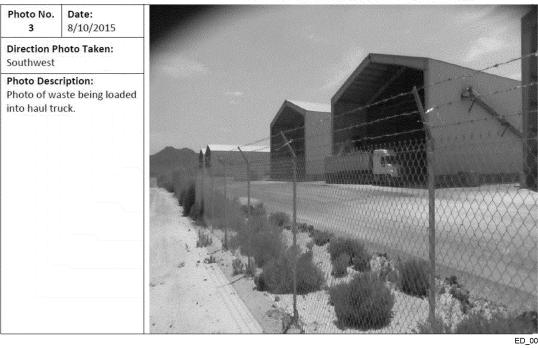
- Pollutant sources
  - Chicken houses

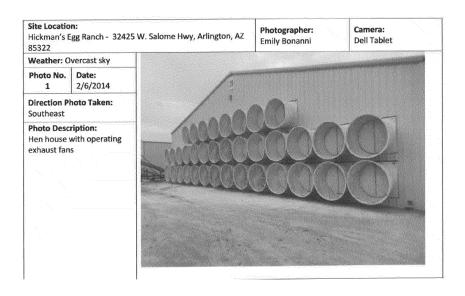
Tonopah manure houses
Photo No. Date: 4 8/10/2015 Direction Photo Taken: West Photo Description: Photo taken from 415<sup>th</sup> Ave looking west at the manure barns.

Tonopah manure house

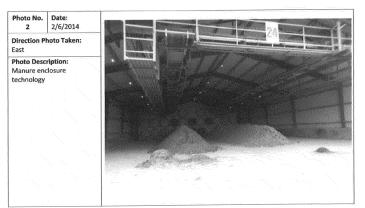


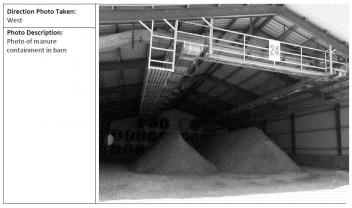
#### Tonopah manure transfer to truck





#### Arlington manure storage





#### Rotary dryer in Arlington

Photo from Don't Waste Arizona (photo taken by member on July 6, 2015)



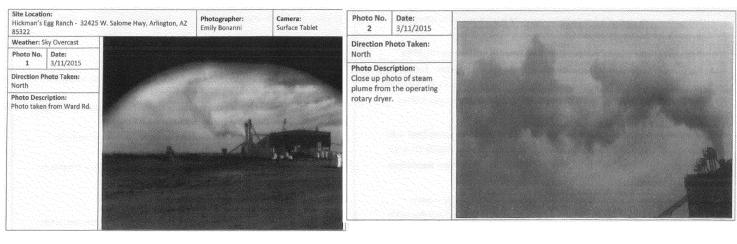
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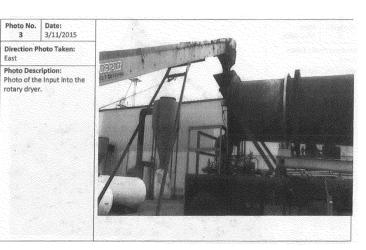
#### Rotary dryer in Arlington

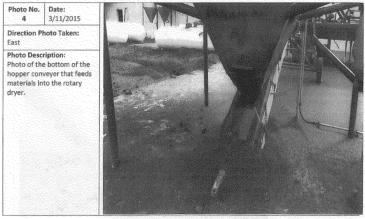




#### Rotary dryer in Arlington







Facility	Source	VOC emissior	PM-10 emission	Other emission	Control technology	Permitted?	Recordkeeping
Tonopah	Chicken house fans	Yes	Yes		None	No	No
Arlington	Chicken house fans	Yes	Yes		None	No	No
Arlington	Rotary Dryer 1 stack and manure belt to dryer	Yes	Yes		Baghouse and scrubber		ADEQ: monthly monitoring from stack; Maricopa County: fuel amount
Arlington	Pellet Rotary Dryer 2 stack and manure belt to dryer	Yes	Yes		Baghouse and scrubber		ADEQ: monthly monitoring from stack; Maricopa County: fuel amount
Arlington	Egg processing (boiler and chiller)			No info	No info	No	None
Arlington	Protein plant boilers	Yes – limited to 1,500 lbs/12 mos.			Wet scrubber		Daily hours cooker exhaust is vented to wet scrubber and O&M Plan

# Equipment covered by the MCAQ Permit – Arlington (updated June 2016)

- Covered Protein plant wet scrubber
  - Rotary dryer fuel use limitations (and opacity limit to 20% under fuel use)
  - Emergency generators
  - Boilers fuel use limitations
  - Crematory de minimus not in use
- Not covered
  - Chicken house fans

#### Under the MCAQ Permit - Tonopah

- Covered
  - Emergency generators
- Not covered
  - Chicken house fans

#### PM2.5

- Ammonia is a precursor to PM2.5
- Dust